

4.2.1. 0604000109 (Tennessee River).

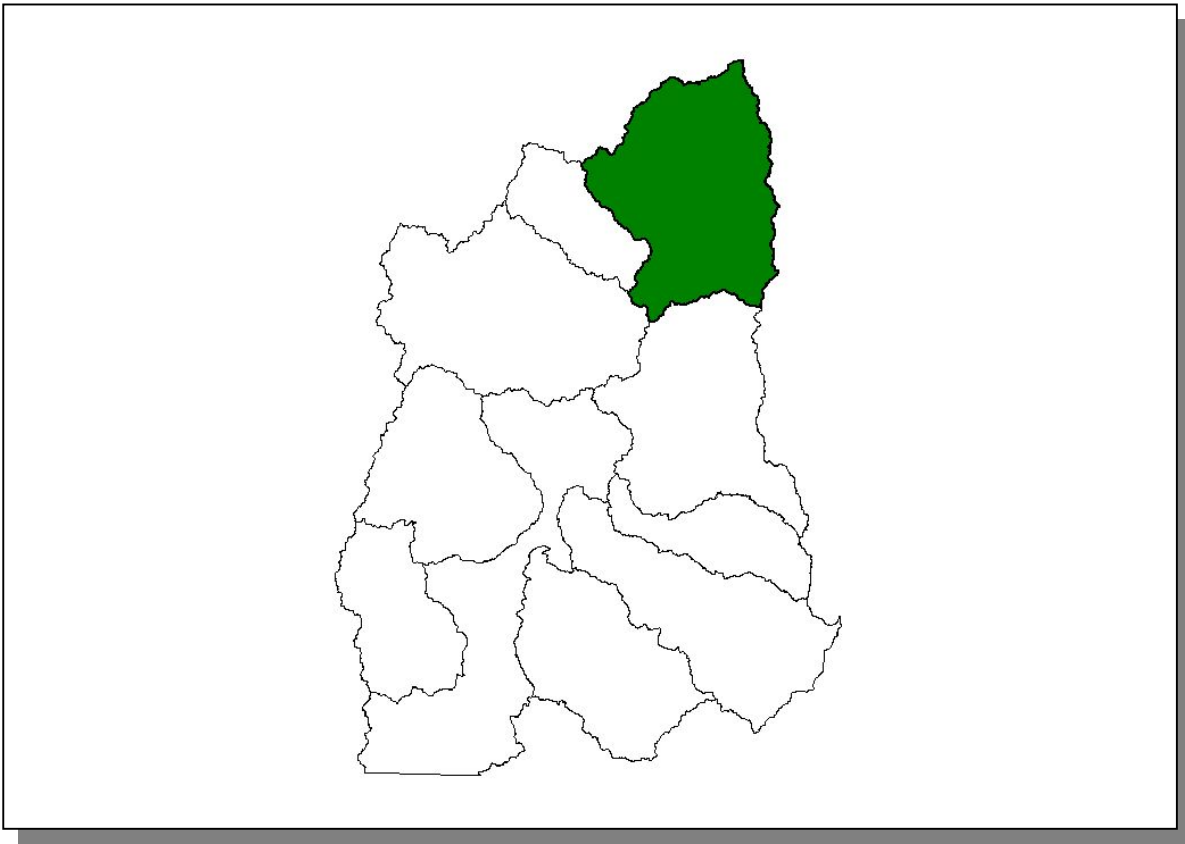


Figure 4-90. Location of Subwatershed 0604000109. All Tennessee Western Valley (Beech River) HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.I.i. General Description.

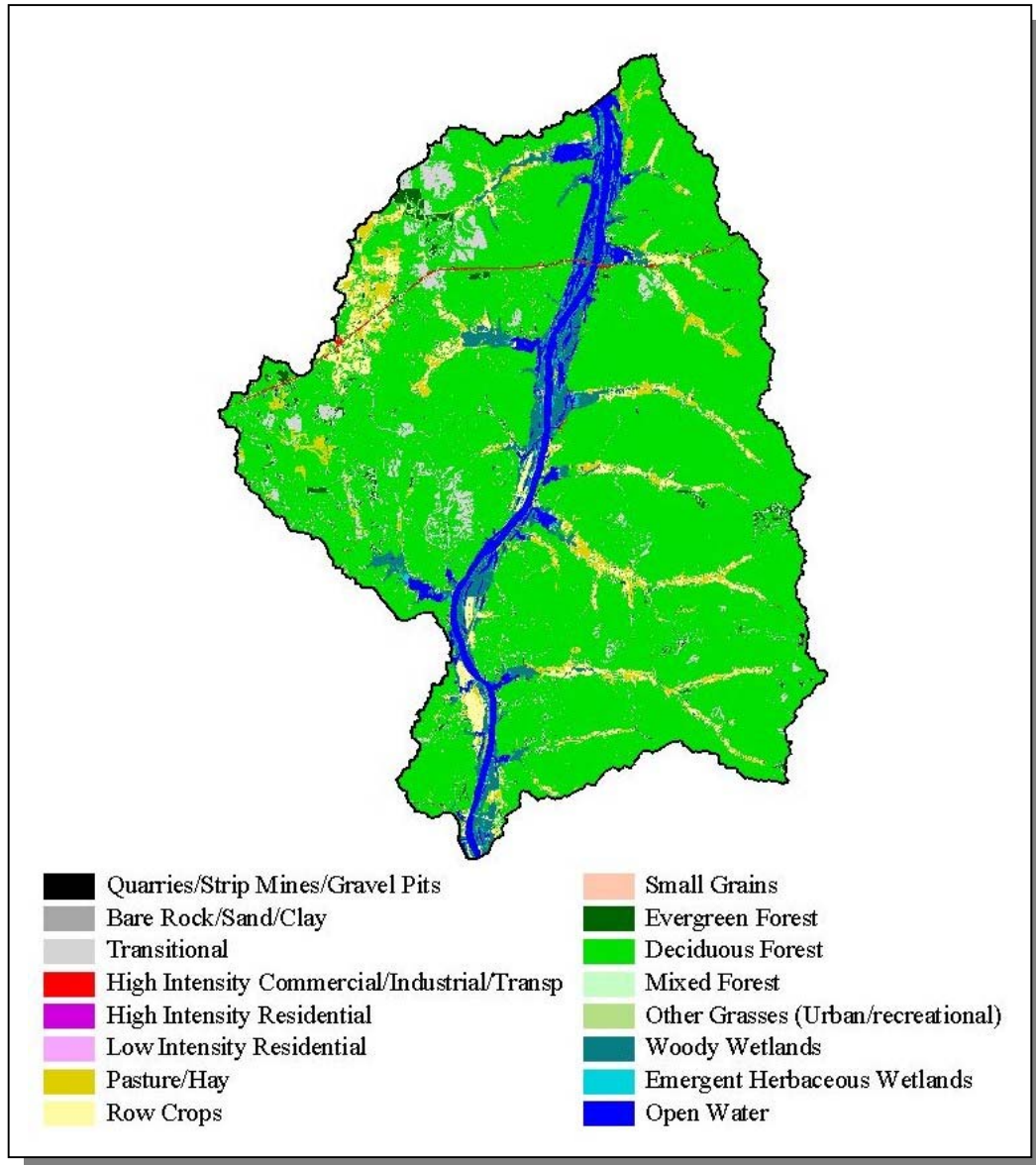


Figure 4-91. Illustration of Land Use Distribution in Subwatershed 0604000109.

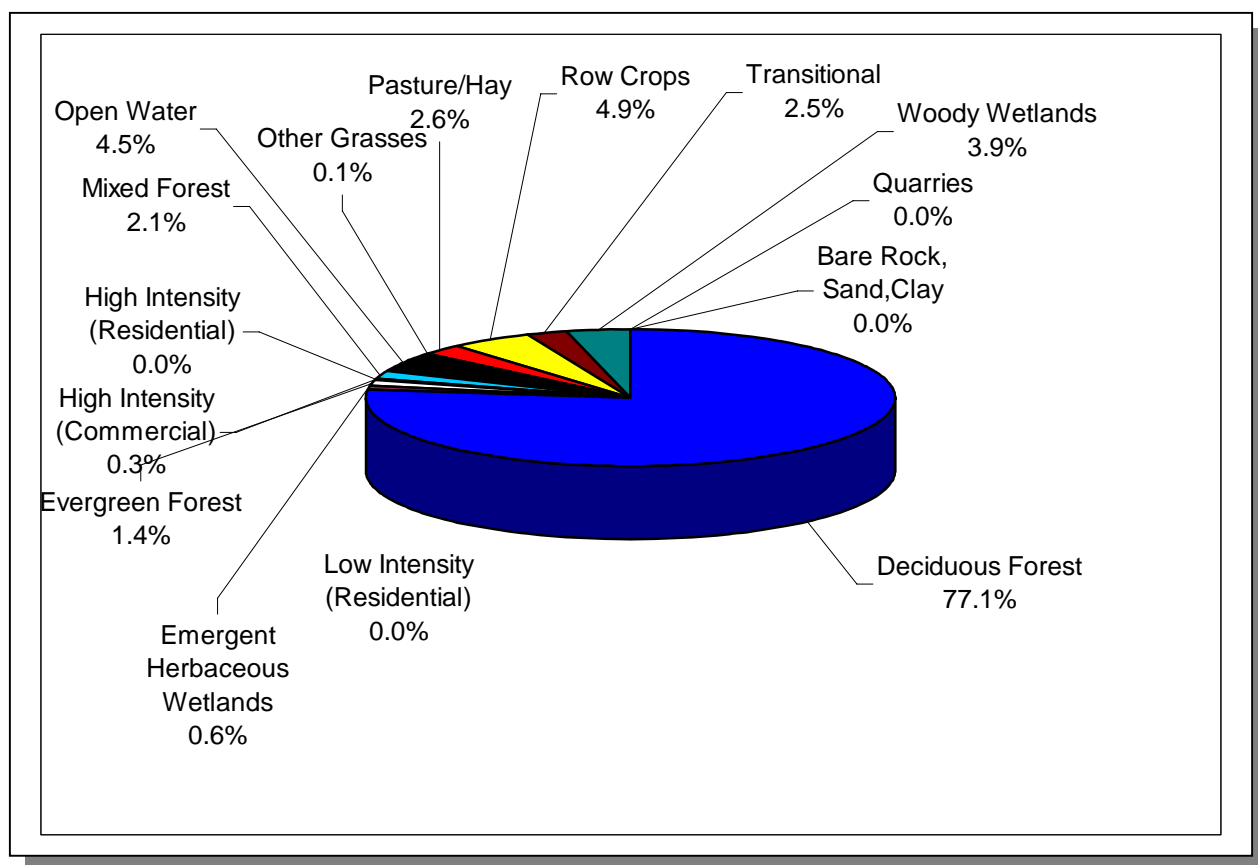


Figure 4-92. Land Use Distribution in Subwatershed 0604000109. More information is provided in Appendix IV.

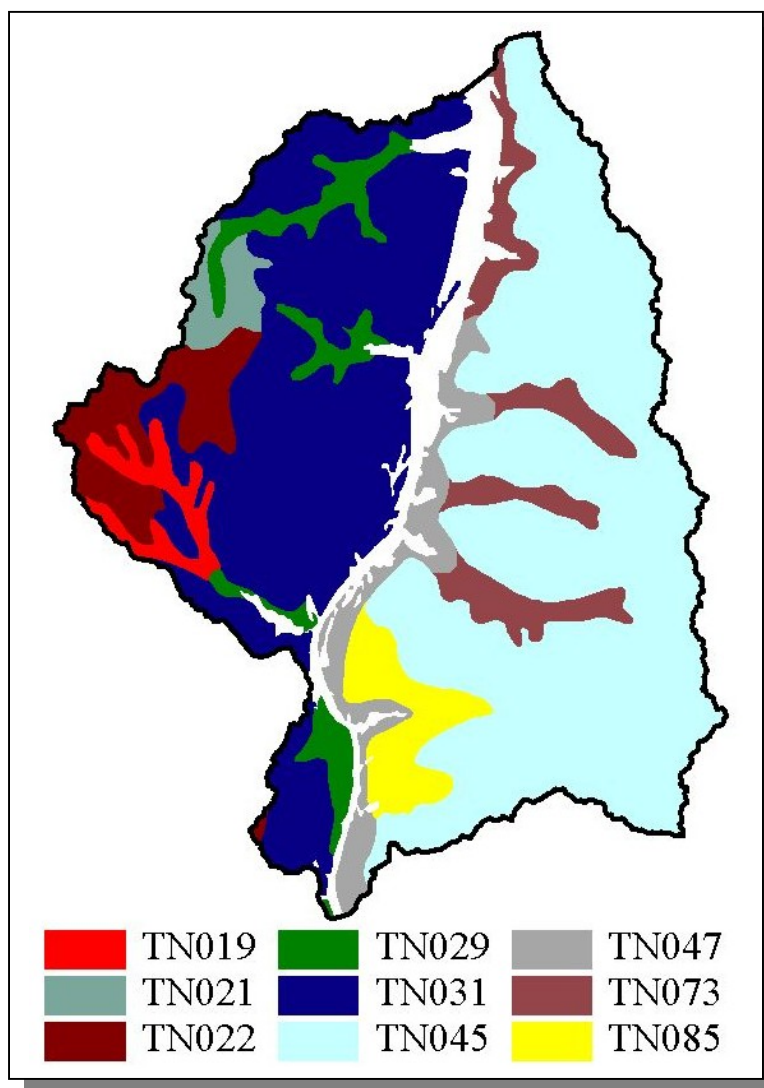


Figure 4-93. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0604000109.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hr)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN019	62.00	C	1.54	4.76	Loam	0.26
TN021	5.00	C	1.30	5.00	Silty Loam	0.43
TN022	5.00	C	1.98	5.07	Loam	0.37
TN029	8.00	C	2.96	5.40	Loam	0.33
TN031	0.00	C	3.27	4.88	Loam	0.33
TN045	0.00	B	1.95	5.45	Loam	0.35
TN047	21.00	C	1.62	5.73	Silty Loam	0.37
TN073	0.00	B	2.97	5.21	Loam	0.34
TN085	0.00	C	1.60	4.89	Clayey Loam	0.30

Table 4-54. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 0604000109. More information is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-1997)
	1990	1997	2000		1990	1997	2000	
Benton	14,524	16,243	16,537	11.00	1,597	1,786	1,819	13.9
Decatur	10,472	10,799	11,731	21.40	2,248	2,319	2,519	12.1
Humphreys	15,795	16,839	17,929	5.76	910	970	1,032	13.4
Perry	6,612	7,438	7,631	29.69	1,963	2,208	2,265	15.4
Totals	47,403	51,319	53,828		6,718	7,283	7,635	13.6

Table 4-55. Population Estimates in Subwatershed 0604000109.

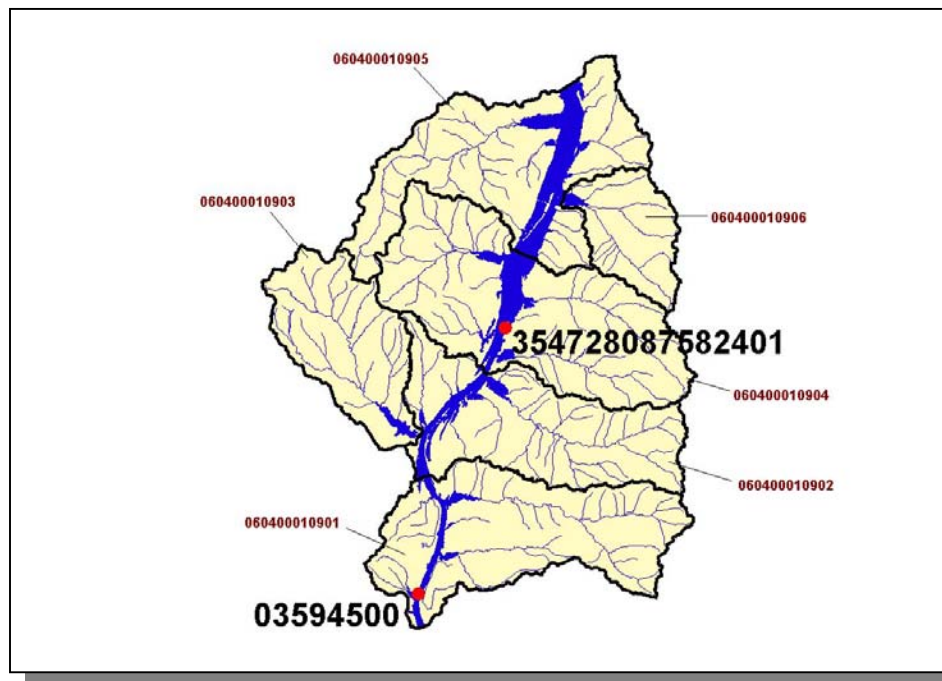


Figure 4-94. Location of Historical Streamflow Data Collection Sites in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905 and 060400010906 boundaries are shown for reference. More information is provided in Appendix IV.

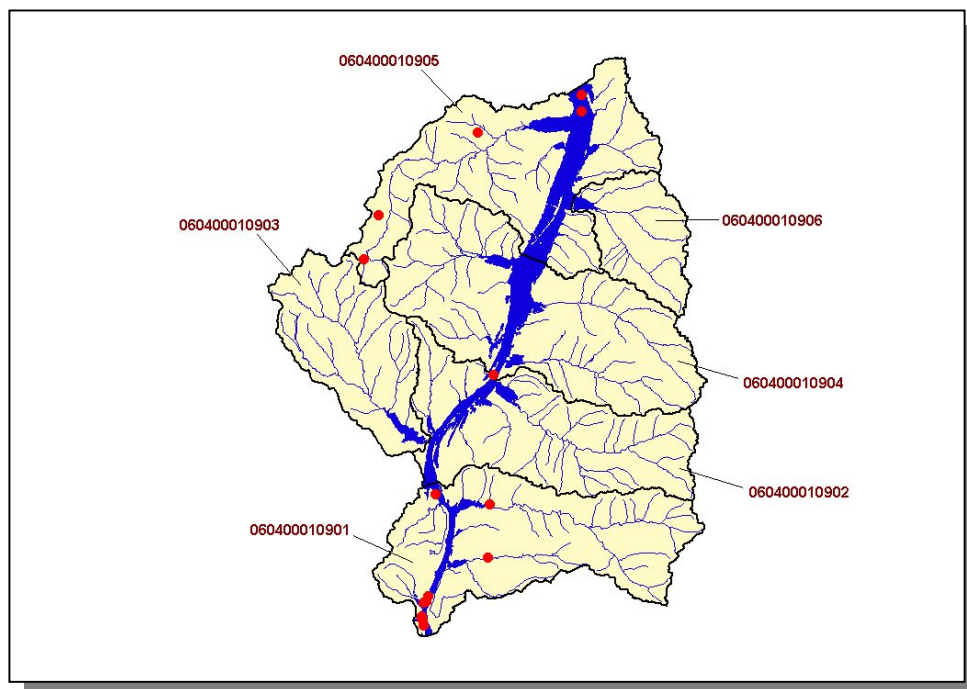


Figure 4-95. Location of STORET Monitoring Sites in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905 and 060400010906 boundaries are shown for reference. More information, including site names and locations, is provided in Appendix IV.

4.2.I.ii. Point Source Contributions.

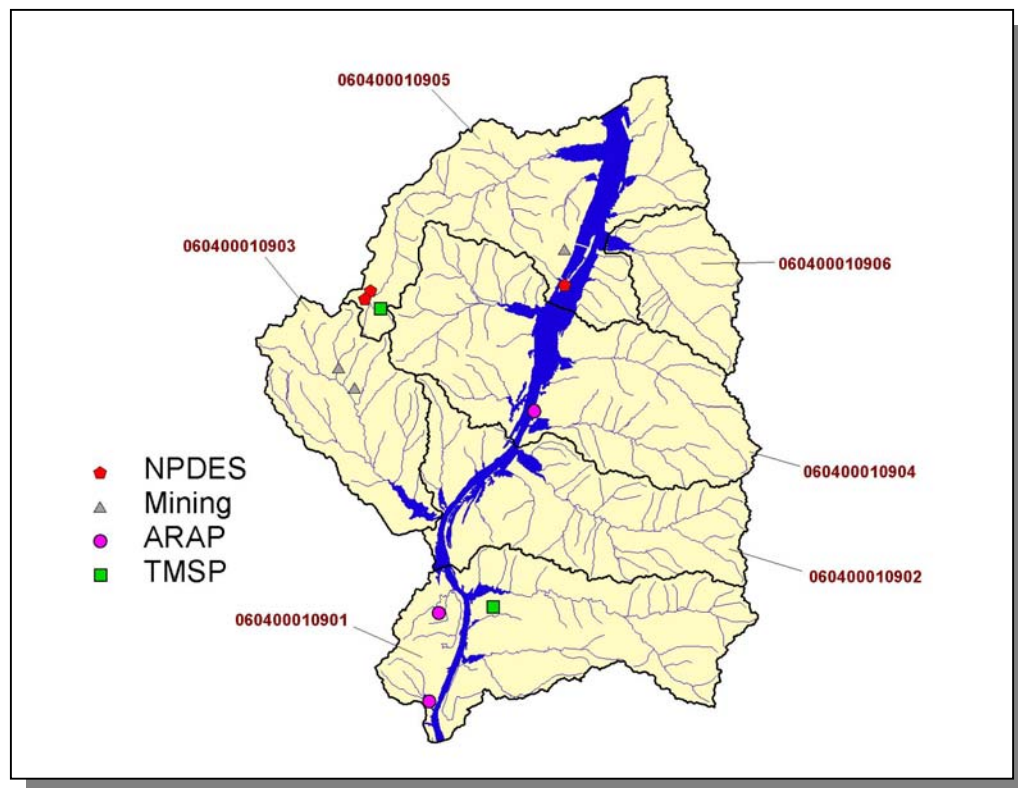


Figure 4-96. Location of Active Point Source Facilities in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905, and 060400010906 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

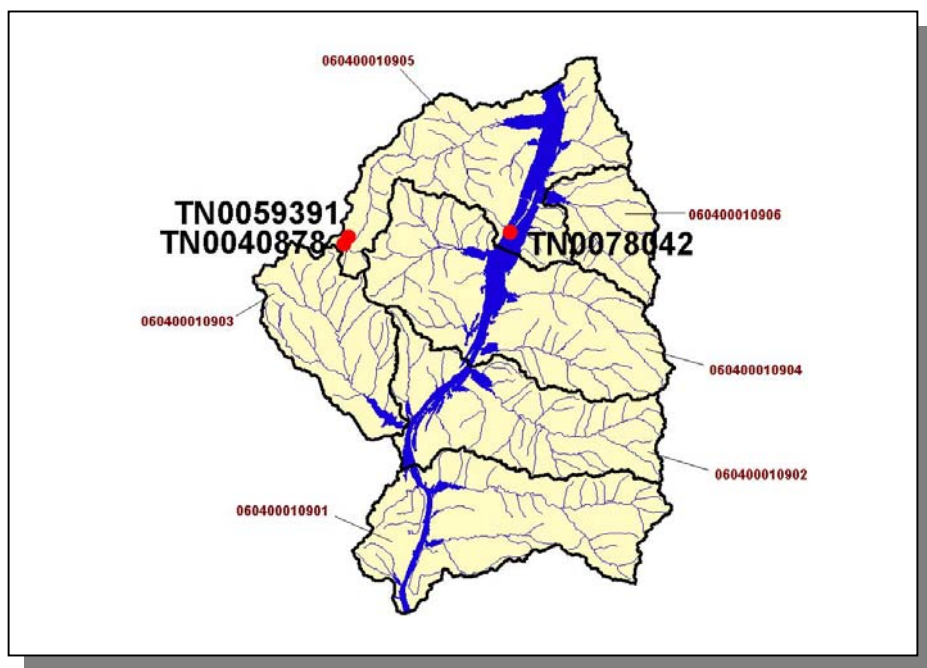


Figure 4-97. Location of NPDES Facilities in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905, and 060400010906 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

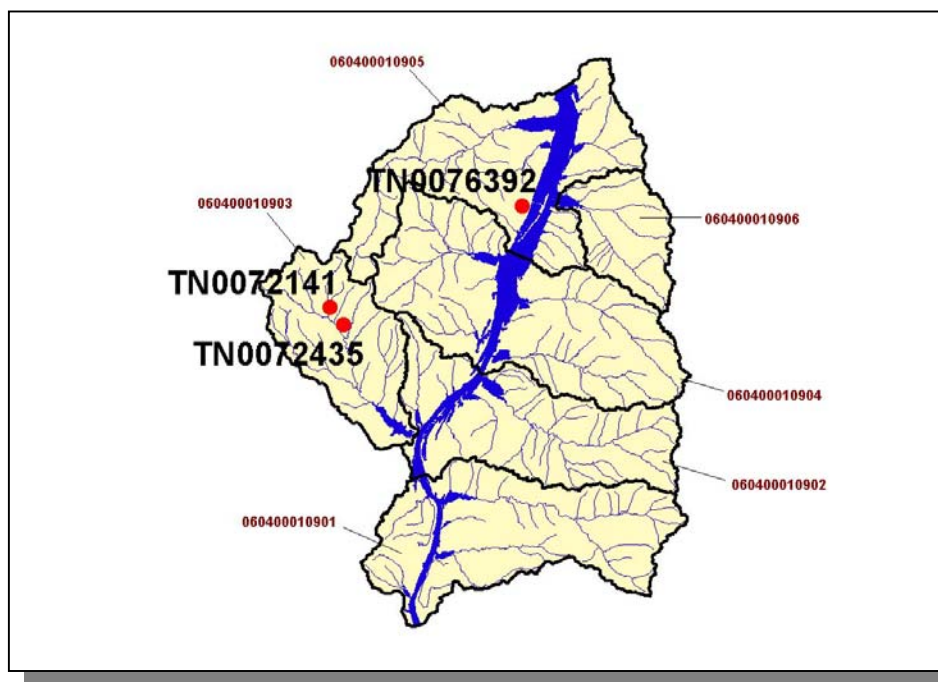


Figure 4-98. Location of Active Mining Facilities in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905, and 060400010906 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

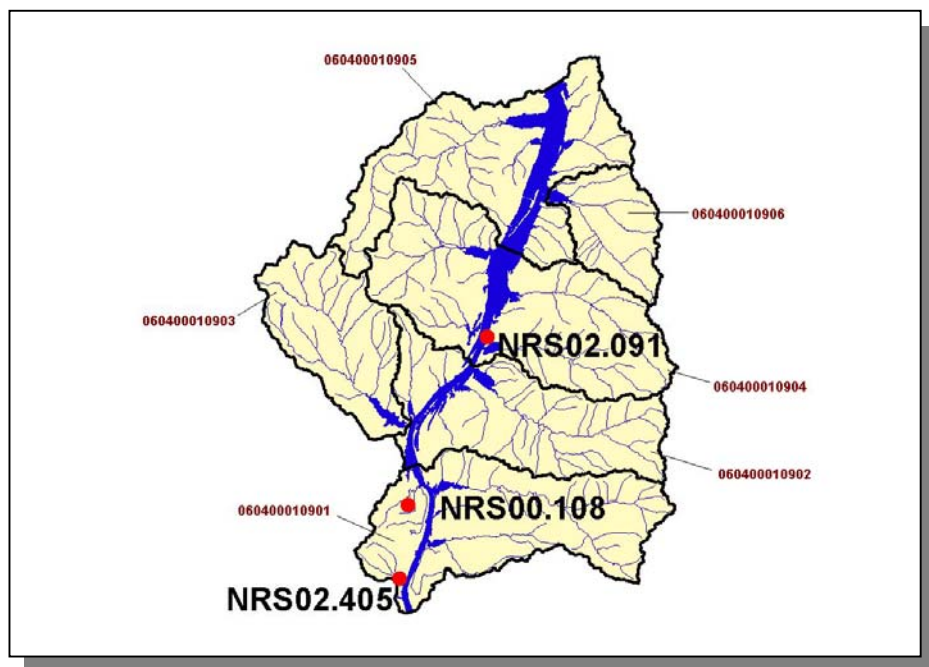


Figure 4-99. Location of ARAP Sites (Individual Permits) in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905, and 060400010906 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

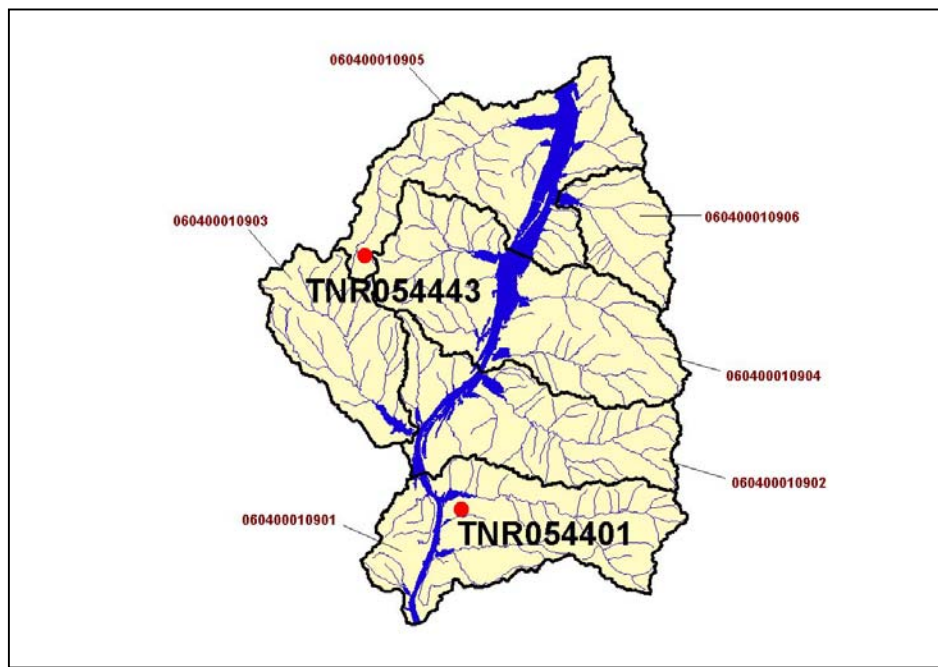


Figure 4-100. Location of TMSF Facilities in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905, and 060400010906 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

4.2.I.ii.a. Dischargers to Water Bodies Listed on the 2002 303(d) List

There are two NPDES facilities discharging to water bodies listed on the 2002 303(d) list in Subwatershed 0604000109:

- TN0059391 (North Forty Truck Stop) discharges to Eagle Creek @ RM 12.1
- TN0040878 (Pecan Shoppe of Camden) discharges to Eagle Creek @ RM 13.3

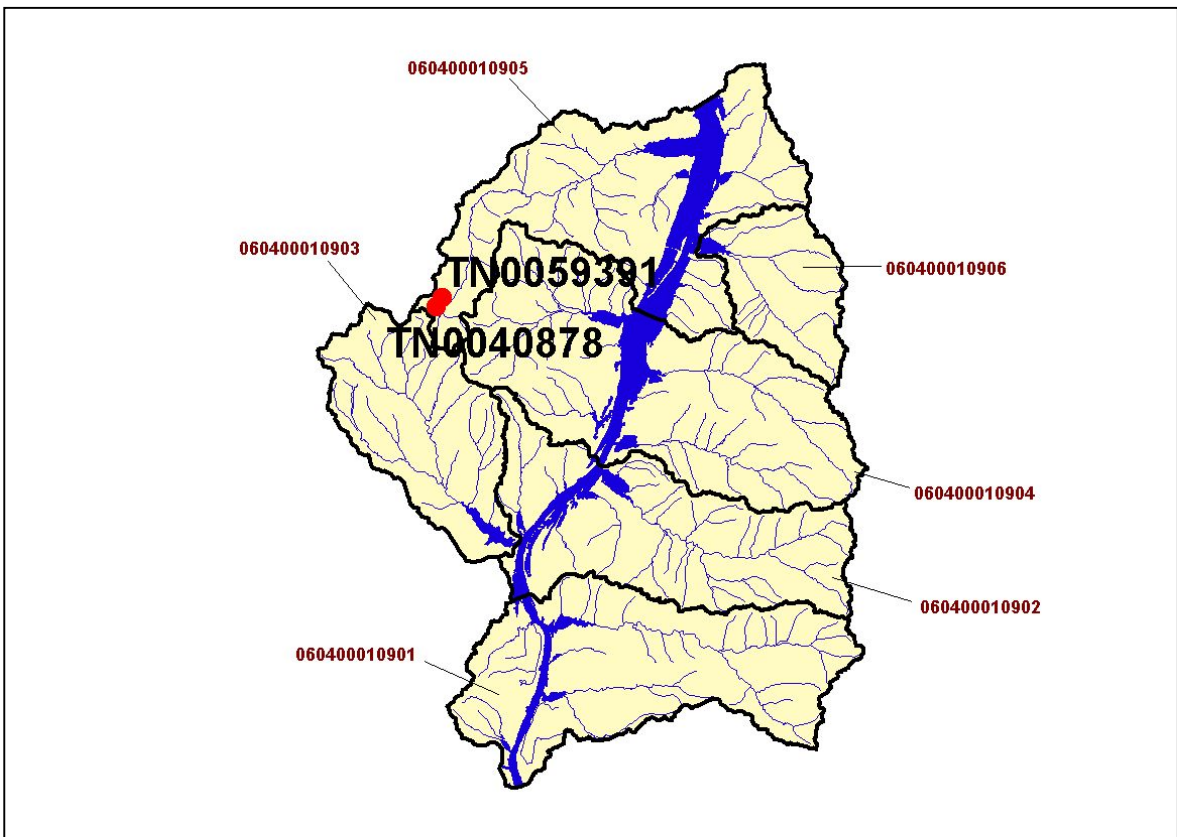


Figure 4-101. Location of NPDES Dischargers to Water Bodies Listed on the 2002 303(d) List in Subwatershed 0604000109. Subwatershed 060400010901, 060400010902, 060400010903, 060400010904, 060400010905, and 060400010906 boundaries are shown for reference. More information, including the names of facilities, is provided in Appendix IV.

PERMIT #	1Q10	3Q10	7Q10	3Q20	QDESIGN
TN0059391		0		0	0.007
TN0040878			0	0	0.003

Table 4-56. Receiving Stream Flow Information for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0604000109. Data are in million gallons per day (MGD). Data were obtained from the USGS publication Flow Duration and Low Flows of Tennessee Streams Through 1992 or from permit files.

PERMIT #	CBOD ₅	FECAL COLIFORM	E. COLI	NH ₃	TRC	TSS	SETTLEABLE SOLIDS	DO	pH
TN0059391	X	X	X	X	X	X	X	X	X
TN0040878	X	X	X	X	X	X	X	X	X

Table 4-57. Parameters Monitored for Daily Maximum Limits for NPDES Dischargers to Waterbodies Listed on the 2002 303(d) List in Subwatershed 0604000109. CBOD₅, Carbonaceous Biochemical Oxygen Demand (5-Day); TRC, Total Residual Chlorine; TSS, Total Suspended Solids.

4.2.I.iii. Nonpoint Source Contributions.

LIVESTOCK (COUNTS)						
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Chickens Sold	Hogs	Sheep
1,624	3,222	17	6	<5	510	5

Table 4-58. Summary of Livestock Count Estimates in Subwatershed 0604000109. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Benton	172.7	172.7	2.1	6.9
Humphreys	241.2	241.2	3.7	14.4
Perry	223.6	223.6	5.1	22.0
Totals	637.5	637.5	10.9	43.3

Table 4-59. Forest Acreage and Average Removal Rates (1987-1994) in Subwatershed 0604000109.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	0.79
Grass (Hayland)	0.15
Legumes (Hayland)	0.81
Legumes, Grass (Hayland)	0.14
Grass, Forbs, Legumes (Mixed Pasture)	0.43
Forest Land (Not Grazed)	0.00
Forest Land (Grazed)	0.00
Corn (Row Crops)	5.50
Sorghum (Row Crops)	3.59
Soybeans (Row Crops)	8.97
Wheat (Close-Grown Cropland)	2.98
Other Cropland not Planted	3.18
Conservation Reserve Program Lands	0.19
Non-Agricultural Land Use	0.00
Other Land in Farms	0.79
Farmsteads and Ranch Headquarters	0.26

Table 4-60. Annual Estimated Total Soil Loss in Subwatershed 0604000109.